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Optical manufacturing requirements for an AVLIS plant

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Prefer oral presentation

Abstract (<250 words):
An uranium enrichment plant is currently planned utilizing Atomic Vapor Laser Isotope Separation (AVLIS) technology. Deployment of the plant will require tens of thousands of commercial and custom optical components and subsystems. The plant optical system will be expected to perform at high levels of efficiency and reliability in a high-average-power laser environment. Demand for this large number of optics must be coordinated during plant construction with the manufacturing capacity of the optical industry. The general requirements and approach to ensure supply of optical components is described. Dynamic planning and a closely coupled relationship with the optics industry will be required to control cost, schedule, and quality of the optical components.

Keywords: precision optical manufacturing, high average power lasers

Biography:
Keith Primdahl is Supply Development Manager for USEC's AVLIS Project. His background includes engineering design, fabrication, installation, and commissioning of scientific systems, with expertise in cryogenic and ultra-high vacuum applications, and often in support of x-ray and visible wavelength optical systems. He holds a BSME and MSME, along with an MBA from Northwestern University.